CITY OF SAN JOSE
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STORMWATER REGULATIONS

INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP), Order R2-2015-0049, issued by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) allows municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies. In compliance with Provision C.3 of the MRP, the City of San Jose and other municipalities in the County of Santa Clara require post-construction stormwater controls on development projects. Post-construction stormwater controls reduce pollutants from flowing to streams, creeks, and the bay and the risk of flooding by managing peak water flows. Currently, the City of San Jose has two Council policies that govern the requirements of these post-construction stormwater controls.

- Council Policy 6-29, Post-Construction Urban Runoff Management, (www.sanjoseca.gov/DocumentCenter/View/3891)
- Council Policy 8-14, Post-Construction Hydromodification Management (www.sanjoseca.gov/DocumentCenter/View/3916)

Additionally, the City of San Jose, as a member of the Santa Clara Valley Urban Runoff Pollution Prevention Program, has created a C.3 Stormwater Handbook to assist in the design and understanding of required post-construction stormwater controls in the Santa Clara County.

In general, stormwater controls goals can be achieved by incorporating low impact development (LID) source control, site design, and treatment measures onsite as well as hydromodification management measures. The City requires all applicants to incorporate these measures into their Regulated Projects.

ROLE OF PUBLIC WORKS

The Department of Public Works (PW) assesses all private development projects during the Planning stage for conformance to Provision C.3. The Project Engineer assigned to a Regulated Project reviews the plans and stormwater worksheets to verify the technical feasibility of maximizing LID practices and adequately sizing post-construction stormwater controls in accordance with Provision C.3 sizing requirements. The PW Project Engineer is the main point of contact for the Applicant with respect to stormwater.

Once the project receives Planning approvals, and moves toward construction, the PW Project Engineer is responsible for the review of grading and drainage plans and post-construction stormwater controls to ensure consistency with the approved Planning Permit and to issue a Grading Permit. Following the Grading Permit issuance and the start of construction, the PW Inspector conducts initial installation inspections of newly-installed stormwater controls to ensure conformance to the approved plans. The Inspector also provides subsequent and final inspections of the stormwater controls.

REGULATED PROJECTS

New or redeveloped commercial, industrial or residential private development projects and public projects that create and/or replace 10,000 square feet or more of impervious surface are considered Regulated Projects. Regulated Projects are divided into four major groups: *Special Land Use Categories*, Other Development Projects, Other Redevelopment Projects and Road Projects*. Regulated Projects are required to implement post-construction stormwater controls to achieve measurable reduction in stormwater pollutant runoff using LID. If the increase or replacement is for 50% or more of existing impervious surface, the impervious area of the entire development site is subject to post-construction stormwater controls. If the increase or replacement is for less than 50% of existing impervious surface, only the new and/or replace impervious surface areas are subject to post-construction stormwater controls.

**Note: The impervious area threshold for new or redeveloped projects for Special Land Use Categories (auto service facilities, retail gasoline outlets, restaurants, and uncovered parking) is 5,000 square feet or more of impervious surface.*

NON-REGULATED PROJECTS

All development projects, which create and/or replace at least 2,500 square feet but less than 10,000 square feet of impervious surface, and detached single-family home

projects, which are not part of a larger plan of development, are considered Non-Regulated Projects. Post-construction stormwater controls are not required for these projects. However, these projects are required to install one or more site design measures, which may include:

- Direct roof runoff into cisterns or rain barrels for reuse.
- Direct roof runoff onto vegetated areas.
- Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
- Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
- Construct sidewalks, walkways, and/or patios with permeable surfaces.
- Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces.

PLANS SUBMITTAL PROCESS

For projects at the Planning stage, the Stormwater Control Plan (SCP) and Stormwater Project Data Form are required for all Regulated Projects. Additional forms may be required for Special Projects. The plans and all forms shall be **submitted with the planning application package**. The Planning Division will route a copy of the complete submittal package to PW for review and comment. PW will provide technical review of the SCP for conformance to Provision C.3.

At the implementation (construction) stage, a SCP shall be included with the Grading and Drainage Plans submittal to PW as part of the Grading Permit process. PW will review the SCP to ensure conformance with the approved Planning Permit.

STORMWATER CONTROL PLANS

As mentioned, a Stormwater Control Plan (SCP) is required for all Regulated Projects. Plans shall be prepared as described below and must include the following items in the Planning submittal.

A. Complete the Pervious and Impervious Surfaces Comparison Table located on the Project Data Form (attached).
B. Identify all existing natural hydrologic features (depressions, names of watercourses, etc.) and significant natural resources.
C. Specify soil type(s).
D. Specify depth to groundwater.
E. Specify 100-year flood elevation.
F. Identify all existing and proposed topographic contours with drainage areas and sub areas delineated and arrows showing flow direction.
G. Separate Drainage Management Areas (DMA) depending on complexity of drainage network.
H. Treatment Control Measure (TCM) Summary Table showing minimum performance criteria vs. design performance for each DMA.
I. Location, size, and identification (including description), of types of TCMs (i.e. bioretention, detention basins, infiltration trenches, etc.).
J. Details of all proposed water quality treatment control measures.
K. Location, size and identification of proposed landscaping/plant material.
L. Ensure consistency with Grading and Drainage Plan and Landscape Plan.
M. Additional information required on the SCP:
    1. Details of Low Impact Development (LID) TCMs identified on the SCP and TCM Summary Table.
    2. Calculations illustrating treatment control measures meet numerical standards set forth in Post-Construction Urban Runoff Management Policy No. 6-29.
    3. Name and location of receiving water body.
    4. Identify pollutants and pollutant source areas, including loading docks, food service areas, refuse areas, outdoor processes and storage, vehicle cleaning, repair or maintenance, fuel dispensing as identified on the Project Data Form.
    5. Identify site design measures and source control measures utilized as identified on the Project Data Form.
    6. TCM Operation and Maintenance (O&M) requirements.
    7. Identify the party responsible for O&M of TCM's.
    8. Licensed certification that the specified TCM's meet the requirements in Post-Construction Urban Runoff Management Policy No. 6-29.

PW has published a checklist, in coordination with ESD, which provides the SCP designers guidance on what is required during the different stages of entitlement.

PW also offers resources to assist with the creation of SCP's. These include standard details, notes, calculation templates, etc. The entitlement checklist and other resources may be found on the PW Applications page under the heading "C.3 Design and Submittal Resources" located at: http://www.sanjoseca.gov/index.aspx?NID=2247.

STORMWATER HYDROMODIFICATION MANAGEMENT (HM)

A Stormwater HM Plan & Report is required for all projects that create and/or replace one acre or more of impervious surface and that are located in the Green or Pink areas of the HM Applicability Map, which is available online at: http://www.sanjoseca.gov/index.aspx?NID=1761. The HM Plan & Report shall be **submitted with the planning application package** for the project. Please

prepare the plans and report as described below and include the following in the submittal.

A. The HM Plan & Report must demonstrate that post-project runoff shall not exceed estimated pre-project rates and durations. Sizing of HM control(s) shall comply with the City of San Jose Council Policy 8-14: Post-Construction Hydromodification Management.
B. The HM Report must include, at a minimum, the following items:
    a. Discussion of the setting and proposed stormwater infrastructure.
    b. Discussion of the technical approach and modeling.
    c. Conclusion based on the analysis.
    d. Table that summarizes the post project DMA's. These values should be the same as the DMA's listed on the TCM summary Table.
    e. Table that summarizes the dimensions, treatment area and underdrain size of each TCM proposed in the HM modeling.
    f. Table that summarizes the dimension and features of any proposed HM systems (i.e. vaults).
    g. Flow-duration curves and model analysis sheets for pre- and post-project conditions with the report.
    h. Site plan.
C. Use a continuous simulation hydrologic computer model with a long-term rainfall record (30 years minimum) to simulate the runoff from the project site under pre- and post-project conditions. The City strongly encourages the use of the Bay Area Hydrology Model (BAHM) to help facilitate plan review. A copy of the BAHM model files must be included with the Planning submittal on either a Compact Disc (CD) or Flash Drive.
D. Provide the location, size, and identification (including description) of types of HM controls such as detention basin, bio-detention unit(s), etc.
E. Include inspection and maintenance information for the HM control(s).

REVISIONS TO THE APPROVED STORMWATER CONTROL PLANS

All revisions to the approved SCP that was part of a Planning Permit shall be submitted to Public Works for review. Revisions that propose a change from LID to non-LID treatment measures or modify the site plan shall require Planning approval and a permit adjustment or amendment, as determined by Planning staff. Revisions that affect the size of LID treatment measures, the sizing method, and/or change the type or manufacturer of non-LID treatment measures **without modifying the site plan** only requires Public Works approval. Public Works will approve the revision as part of the Grading and Drainage plan review. If a Grading Permit has been issued with a SCP, then Public Works will process a plan revision to said permit. Additional review fees will apply.

STORMWATER EVALUATION FORM

The attached Form is to be used for reference only. The most current form should always be used and is located at the following location:

http://www.sanjoseca.gov/index.aspx?NID=5218

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY
Planning, Building and Code Enforcement

Stormwater Evaluation Form

FILE #

This form must be submitted with other Planning Permit applications with Sections 1.a and 2.e completed, at a minimum. The ENTIRE form is required to be completed ONLY if the project meets the criteria below:

- **Creates or replaces 10,000 sq. ft. or more of impervious surface on a project site; OR**
- **Involves a restaurant, auto service facility, retail gasoline outlet, uncovered parking lot, or top uncovered portion of a parking structure that creates or replaces 5,000 sq. ft. or more of impervious surface on a project site.**

Such projects must comply with Provision C.3 of the Municipal Regional Stormwater Permit (MRP) and must complete this form. For more information and definitions, see the Stormwater Management web page at www.sanjoseca.gov/planning.

What is an impervious surface? An impervious surface is pavement or other surface covering that prevents land from absorbing rainfall and stormwater. Impervious surfaces include driveways, walkways, parking lots, rooftops and any other continuous watertight covering. Pervious pavement underlain with pervious soil or material, e.g., drain rock, that infiltrates rainfall at a rate equal to or greater than surrounding unpaved areas OR that stores and infiltrates the water quality design volume specified in Provision C.3.d of the MRP, is not considered an impervious surface.

1.a. Are any of these uses included in your project?
Check all that apply.

☐ Restaurant

☐ Retail Fuel Outlet

☐ Uncovered Parking

☐ Auto Service, as categorized by the Standard Industrial Classification (SIC) Codes 5013-5014, 5541, 7532-7534, 7536-7539. Determine your SIC Codes at www.osha.gov. List the applicable SIC Code/s: _____

1.b. Check the watershed in which your project is located.
See the Watershed Maps web page at www.sanjoseca.gov

☐ Baylands

☐ Calabazas

☐ Coyote (including Lower Penitencia)

☐ Guadalupe

☐ San Tomas

1.c. Special Project Status.
Use the online Special Project Worksheet at www.sanjoseca.gov to determine if your project qualifies as a Special Project. Does your project qualify?

☐ Yes If yes, attach the Special Project Worksheet to this application.
☐ No

Note: A separate Narrative is required for all Special Projects. Refer to the Special Projects Worksheet for requirements.

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2. SURFACE DATA

2.a. Enter the Project Phase Number (1, 2, 3, etc. or N/A if Not Applicable): _____

2.b. Total area of site: _____acres

2.c. Total Existing Impervious Surfaces on site: _____sq. ft.

2.d. Total area of site that will be disturbed: 0._____acres

COMPARISON OF IMPERVIOUS AND PERVIOUS SURFACES AT PROJECT SITE	**Existing Surface** sq. ft.	**Proposed Surface**		RESET CALCULATIONS
		To Be Replaced sq. ft. [1]	**New** sq. ft. [2]	
2.e. **IMPERVIOUS SURFACES**				
Roof Area				
Parking				
Sidewalks, Patios, Driveways, Etc.				
Public Streets				**Total Proposed Impervious Surface (replaced + new)**
Private Streets				
Online form auto-calculates **Impervious Surfaces Total**	e.1. 0	e.2. 0	e.3. 0	e.4. 0
2.f. **PERVIOUS SURFACES**				
Landscaped Area				
Pervious Paving				**Total Proposed Pervious Surface (replaced + new)**
Green Roof and other Pervious Surfaces				
Online form auto-calculates **Pervious Surfaces Total**	f.1. 0	f.2. 0	f.3. 0	f.4. 0

2.g. **Percentage of Site's Impervious Area Replacement** (e.2 ÷ 2.c) X 100: Online form auto-calculates	g. %

[1] *Proposed Replaced Impervious Surface:* Replacement of an existing impervious surface with another impervious surface.

[2] *Proposed New Impervious Surface:* New impervious surface that will cover an existing pervious surface.

3. PROVISION C.3 APPLICABILITY

3.a. Is box 2.e.4 above equal to 10,000 sq. ft. or more for any type of project, or 5,000 sq. ft. or more for restaurants, auto service facilities, retail gas outlets, and uncovered parking? Check one:

☐ Yes. Site Design, Source Control, and Treatment System requirements will all apply to the project area.

☐ No. Site Design and Source Control requirements will apply to the project area (Treatment Systems do not apply).

3.b. Is box 2.g above equal to or greater than 50%? Check one:

☐ Yes. Site Design, Source Control, and Treatment System requirements all apply to the entire site.

☐ No. Site Design, Source Control, and Treatment System requirements only apply to the area of site that is disturbed.

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3.c. Indicate the Provision C.3 measures to be applied to your project. Check all that apply:

SITE DESIGN MEASURES

PROTECTION MEASURES

- ❑ Protect existing trees, vegetation, and soil.
- ❑ Protect riparian and wetland areas/ buffers.
- ❑ Preserve open space and natural drainage patterns.
- ❑ Rainwater harvesting and use (e.g., rain barrel, cistern connected to roof drains) [1]

LANDSCAPE DESIGN MEASURES

- ❑ Direct runoff from roofs, sidewalks, patios to landscaped areas.
- ❑ Plant trees adjacent to and in parking areas and adjacent to other impervious areas.

DESIGN MEASURES TO MINIMIZE IMPERVIOUS SURFACE AREA

- ❑ Reduce existing impervious surfaces.
- ❑ Cluster structures/pavement.
- ❑ Create new pervious areas:
  - ❍ Landscaping
  - ❍ Parking stalls
  - ❍ Walkways and patios
  - ❍ Emergency vehicle access
  - ❍ Private streets and sidewalks
- ❑ Install a Green Roof on all or a portion of the roof.
- ❑ Parking:
  - ❍ On top of or under buildings
  - ❍ Not provided in excess of Code
- ❑ Other: _____

SOURCE CONTROL MEASURES

- ❑ Beneficial landscaping [3]
- ❑ Use water efficient irrigation systems.
- ❑ Good housekeeping, e.g., sweep pavement and clean catch basin.
- ❑ Label storm drains.
- ❑ Connect to the sanitary sewer: [2]
  - ❍ Covered trash/recycling enclosures
  - ❍ Interior parking structures
  - ❍ Wash area/racks
  - ❍ Pools, spas, fountains
  - ❍ Covered loading docks and maintenance bays
  - ❍ Pumped groundwater
- ❑ Fueling areas must (all required):
  - Be graded to prevent ponding.
  - Use a concrete surface.
  - Be separated from the site by a grade break to prevent run-on.
  - Have a canopy cover extending at least 10 feet from each pump.
- ❑ Industrial, outdoor material storage, and recycling facilities must (all required):
  - Stockpile material on an impervious surface or under a permanent roof or covering.
  - Direct ponded water to the sanitary sewer,[2] an on-site treatment system, or off-site disposal.
  - Install berms or curbs to prevent runoff from the storage/processing areas.
  - Segregate pollutant-generating activities into a distinct drainage management area and provide treatment.
- ❑ Other: _____

TREATMENT SYSTEMS

LID TREATMENT

- ❑ Impervious surfaces drain to a self-retaining area that is sized per the design criteria listed in the C.3 Stormwater Handbook.
- ❑ Rainwater harvest and use (e.g., cistern or rain barrel sized for C.3.d treatment)
- ❑ Infiltration basin
- ❑ Infiltration trench
- ❑ Exfiltration trench
- ❑ Underground detention and infiltration system (e.g. pervious pavement drain rock, large diameter pipe)

BIOTREATMENT

For use when Infiltration and Rainwater Harvest and Use is proven infeasible

- ❑ Bioretention area
- ❑ Flow-through planter
- ❑ Tree box with bioretention soil [4]
- ❑ Other: _____

OTHER TREATMENT METHODS

SPECIAL PROJECTS ONLY [5]

- ❑ Proprietary tree box filter
- ❑ Media filter (sand, compost, or proprietary media)

MULTI-STEP PROCESS ONLY [6]

- ❑ Vegetated filter strip
- ❑ Dry detention basin

FOOTNOTES

1 As a site design measure, it does not have to be sized to comply with Provision C.3.d treatment requirements.
2 Subject to the requirements of the sanitary sewer authority.
3 Landscaping that minimizes irrigation and runoff, promotes surface infiltration where possible, and minimizes the use of pesticides and fertilizers.
4 Bioretention soils shall infiltrate runoff at a minimum of 5 inches per hour during the life of the facility and sustain healthy, vigorous plant growth.
5 These treatment measures are only allowed if the project qualifies as a Special Project.
6 These treatment measures are only allowed as part of a multi-step treatment process.

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4. TREATMENT SYSTEM SIZING FOR PROJECTS WITH TREATMENT REQUIREMENTS

For each treatment system component, indicate the hydraulic sizing criteria used and provide the calculated design flow or volume to be treated:

Treatment System Component	**Hydraulic Sizing Criteria** Enter numbers from Table below	**Design Flow or Volume** cfs or cu.ft.

CODING TABLE FOR HYDRAULIC SIZING CRITERIA Enter the appropriate number in the above column		
1a: Volume – WEF Method 1b: Volume – CASQA BMP Handbook Method	2a: Flow – Factored Flood Flow Method 2b: Flow – CASQA BMP Handbook Method 2c: Flow – Uniform Intensity Method	3: Combination Flow and Volume Design Basis

5. HYDROMODIFICATION MANAGEMENT (HM) APPLICABILITY

5.a. Does the project create or replace one acre or more of impervious surface AND create an increase in total impervious surface from the pre-project condition (from page 2, is 2.e.4 > 2.e.1 and ≥ one acre)? Check one:

☐ Yes. Continue to Question 5.b.
☐ No. Project is exempt from Hydromodification Management.

5.b. Is the project located in the green "Subwatersheds less than 65% Impervious" area on the HM Applicability Map? Check one:

☐ Yes. Project must implement HM requirements. Continue to Question 5.c.
☐ No. Project is exempt from Hydromodification Management.

5.c. If Yes to 5.b, select the specific flow duration controls for Hydromodification Management. Check all that apply:

☐ Detention basin
☐ Underground tank or vault
☐ Bioretention with outlet control
☐ Other: _____

6. OPERATION & MAINTENANCE (O&M) CONTACT INFORMATION

Please enter the contact information of the Responsible Party for Stormwater Treatment/Hydromodification Control O&M:

NAME	**MAILING ADDRESS**	**EMAIL/PHONE**
RESPONSIBLE PARTY IN CHARGE OF O&M	STREET:	EMAIL:
NAME:	CITY: ZIP:	PHONE:
FIRM NAME IF ANY:		